The area outside the nucleus is shaded yellow to highlight the **Electron Cloud.**

Electrons move fast so it’s hard to locate them with 100% accuracy. The electron cloud and the different energy levels represent the area where electrons are likely to be.

2

4

Helium

**He**

**5.**

The electrons in this model are sitting on a blue ring. This ring represents an **Energy Level** or **Shell**. There can be as many as 7 energy levels.

**The electrons are smaller than protons and neutrons. They orbit (travel around) the nucleus.**

**3.**

**2.**

Protons and neutrons are found at the center of an atom which is called the **Nucleus.**

**These are called particles or *sub-atomic particles* because they are the building blocks of atoms.**

**1.**

This is the basic structure of a helium atom. All atoms contain a combination of three things:

**Protons**

**Neutrons**

**Electrons**